SFUND RECORDS CTR
2070522

Tom.Perina@CH2M.com
06/08/2004 12:03 PM

To Christopher Lichens/R9/USEPA/US@EPA
cc
bcc
Subject RE: Deep Well Memo, Omega Site

Chris,

Attached are review comments on the CDM memo. Note that I omited the request for SVOCs, as they do not seem to be critical; the main contaminants are covered by VOC analysis.
Please call me with any questions.

Tom

-----Original Message-----
From: Lichens.Christopher@epamail.epa.gov [mailto:Lichens.Christopher@epamail.epa.gov]
Sent: June 07, 2004 11:24 AM
To: Perina, Tom/SBO
Subject: Deep Well Memo, Omega Site

----- Forwarded by Christopher Lichens/R9/USEPA/US on 06/07/2004 11:23 AM -----

Chuck McLaughlin <cmclaugh@demaximis.com>
06/07/2004 11:04 AM

To: Christopher Lichens/R9/USEPA/US@EPA
cc: Dave Chamberlin <chamberlindc@cdm.com>, Sharon Wallin <wallinsl@cdm.com>
Subject: Deep Well Memo, Omega Site

Chris:

In accordance with our discussion on Friday, please reference attachment relative to the installation of the deep well.

If you have any questions, please call me

Chuck(See attached file: Deep WellMemo - 1.pdf)

CDM 7 June 2004 memo - review comments 8 June 2004.pdf

MEMORANDUM **CH2MHILL**

Review Comments on *Memorandum, USEPA Request for Installation of Additional Deeper Well, Omega Chemical Superfund Site.*

TO: Christopher Lichens/USEPA Region IX

FROM: Tom Perina/CH2M HILL, San Bernardino

DATE: June 8, 2004

As you requested, CH2M HILL reviewed the memorandum prepared by Camp Dresser & McKee, Inc. (CDM), dated June 7, 2004, with the subject: *USEPA Request for Installation of Additional Deeper Well, Omega Chemical Superfund Site.*

1. The document presents the proposed well construction design, and well installation and sampling procedures. The proposed procedures seem to be adequate for this task. However, the technical reasons for the well placement and for the proposed screen depth-interval are not presented. The rationale for the deep well placement and construction should be based on the results of the recent soil and groundwater investigation (fall 2003 - winter 2004) as well as previous investigations at the site. The relevant results should be summarized and supported by cross-section(s), diagrams, etc., as appropriate. Without such rationale, the review cannot comment on the proposed placement and screen depth of the well.

2. Downhole geophysical logging should be considered to complement the visual soil description. The lithologic information from this boring will likely be used in support of decisions regarding the removal action at the Omega property. Because the visual soil description will be based on drill cuttings only, the geophysical logging would enhance the soil characterization. Because of the use of the conductor casing, the only practical logging methods would be natural gamma, neutron, or similar. The downhole logging may not be appropriate if there is site information indicating that these methods do not provide adequate resolution of the soil types at the site. This issue should be discussed in the memorandum.

3. The review recommends performing the well sampling/purging as a mini-pumping test at a minimum additional cost. The objective would be to estimate hydraulic parameters of the deeper aquifer zone in order to assess the fate and transport of potential contamination. The drawdown in the well should be recorded with a transducer/data logger, the pumping rate measured, and recovery should also be recorded. One-hour of pumping may be sufficient; the test duration should be based on a real-time review of the recorded drawdown and professional judgement. The pumping rate should be

constant or variable in a step-wise fashion for easy analysis. A slug test may be considered as an alternative (both slug-in and slug-out tests should be performed).